

## CLAIMS

WHAT IS CLAIMED IS:

5

1. An antenna system for a wireless communications device, comprising:
  - a first antenna circuit configured to receive a first communications signal;
  - a second antenna circuit configured to receive an auxiliary signal; and
  - a processor performing the steps of:
    - receiving information indicative of the auxiliary signal,
    - determining, using the information, that a second communications signal is preferable to the first communications signal, and
    - directing that one of the first antenna circuit and the second antenna circuit be configured to receive the second communications signal.
2. The antenna system according to claim 1,
  - wherein the first antenna circuit is configured to receive the first communications signal from a first base station, and
  - wherein the second antenna circuit is configured to receive the auxiliary signal from a second base station.

3. The antenna system according to claim 1, wherein the second antenna circuit is configured to receive an auxiliary signal on a different channel than the first communications signal.
- 5 4. The antenna system according to claim 1, wherein the second antenna circuit is configured to receive an auxiliary signal on a different band than the first communications signal.
- 10 5. The antenna system according to claim 1, wherein the second antenna circuit is configured to receive an auxiliary signal on a different mode than the first communications signal.
- 15 6. The antenna system according to claim 1, wherein the processor includes the step of directing that the first antenna circuit be configured to receive the second communications signal.
7. The antenna system according to claim 1, wherein the processor includes the step of directing that the second antenna circuit be configured to receive the second communications signal.
- 20 8. The antenna system according to claim 1, wherein the second antenna circuit is a dual-band antenna

9. The antenna system according to claim 1, wherein the second antenna is disposed approximately orthogonally to the first antenna.
- 5 10. The antenna system according to claim 1, wherein the second antenna is a diversity antenna.
- 10 11. The antenna system according to claim 1, wherein the second antenna includes a first auxiliary antenna and a second auxiliary antenna, the first auxiliary antenna being adapted to receive the first communications signal.
- 15 12. The antenna system according to claim 11, wherein the second auxiliary antenna is adapted to receive GPS band signals.
- 15 13. The antenna system according to claim 1,  
wherein the first antenna circuit includes a selector module, and  
wherein the second antenna circuit includes the selector module, the selector module being coupled to the main controller.
- 20 14. The antenna system according to claim 13,  
wherein the selector module includes a single phase locked loop integrated circuit (PLL IC) for use by the second antenna circuit, and

wherein the selector module includes a dual PLL IC for use by the second antenna circuit and the first antenna circuit.

15. An auxiliary reception system, comprising:

5           an auxiliary antenna adapted to receive at least one of global positioning system (GPS) band signals, first communications band signals and second communications band signals; and

10           a main controller coupled to the auxiliary antenna, the main controller receiving the at least one of the GPS band signals, the first communications band signals and the second communications band signals from the auxiliary antenna, the main controller being adapted to scan through at least one of channels, bands and modes of wireless communications via the auxiliary antenna.

15. A method for providing auxiliary reception in a wireless communications system, comprising the steps of:

receiving signals via a main antenna at a particular channel, band or mode;  
receiving auxiliary signals via an auxiliary antenna at different channels, bands or modes;

20           evaluating received auxiliary signals via a main controller; and  
handing off the main antenna from the particular channel, band or mode to a different channel, band or mode, the different channel, band or mode having been evaluated by the main controller.

17. The method according to claim 16, further comprising the steps of:  
receiving global positioning system (GPS) band signals via the auxiliary antenna; and  
determining location information from the received GPS band signals.

5

18. The method according to claim 17, further comprising the step of:  
transmitting the determined location information via the main antenna.

THE EPOCH SYSTEMS, INC. - 2015 RELEASE UNDER E.O. 14176